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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/440,624	11/16/1999	YUTAKA MAEDA	0879-0244P	3184

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EXAMINER

JONES, HEATHER RAE

ART UNIT	PAPER NUMBER
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2621

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/440,624	MAEDA, YUTAKA	
	Examiner	Art Unit	
	Heather R. Jones	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 June 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1.2 and 16-26 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1.2 and 16-26 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 16 November 1999 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/13/2007.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. 6/18/2007.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed June 13, 2007 have been fully considered but they are not persuasive.

The Applicant argues on Page 5, line 24 – page 6, line 13 that Hashimoto fails to disclose a changing device which automatically changes a default imaging cycle of the imaging device by doubling according to the brightness of the object, thereby changing the maximum exposure period for the imaging device for the captured sequence of images, wherein the changing device doubles the default imaging cycle at least once when the brightness of the object is lower than the brightness corresponding to the default imaging cycle. The Examiner respectfully disagrees. Hashimoto et al. discloses a detection device, which detects brightness of the object; and a changing device which automatically changes the imaging cycle of the imaging device by doubling according to the brightness of the object, thereby changing the maximum exposure period for the imaging device for the captured sequence of images, wherein the changing device doubles the default imaging cycle at least once when the brightness of the object is lower than the brightness corresponding to the default imaging cycle. (Fig. 7 – the default imaging cycle is set to 1/60 and then it changes to 1/30 to accommodate the brightness; col. 11, lines 42-52). Therefore, Hashimoto meets the claim limitations.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, and 16-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (U.S. Patent 6,498,623) in view of Hashimoto (U.S. Patent 6,972,799).

Regarding claim 1, Anderson et al. discloses an electronic camera, comprising: a display (302) to display a sequence of captured images of an object (col. 8, lines 50-55); an imaging device (224) which captures the sequence of images and outputs image signals for the sequence of images at a rate defined by an imaging cycle (frame rate) of the imaging device (224), the imaging cycle (frame rate) defining a maximum exposure period (exposure time) for the imaging device for the captured sequence of images (col. 7, lines 57-63; col. 8, lines 39-41); a changing device (238) which automatically changes the imaging cycle (frame rate) of the imaging device (224), thereby changing the maximum exposure period (exposure time) for the imaging device (224) (col. 4, lines 64-67; col. 7, lines 53-63 – the frame rate and the exposure time are related as defined by the equation given in col. 7, lines 57-58, therefore, if one changes then the other one would automatically be affected); an image memory (536) for temporarily storing the image signals sequentially outputted from the imaging

device (224), the image signals in the image memory (536) are read out with a predetermined interval and outputted to the display (302) (col. 6, lines 47-65); and a controller (390) which controls the display (302) to display the sequence of images according to the image signals while the imaging device (224) is capturing subsequent images, such that the display (224) shows a live image of the captured sequence of images to enable determination of an image-capturing angle of view (col. 6, lines 60-65 – by showing a live image the user can determine the image-capturing angle of view). However, Anderson et al. fails to disclose a detection device that detects the brightness of the object as well as a changing device that automatically changes the imaging cycle of the imaging device according to the brightness of the object, thereby changing the maximum exposure period for the imaging device for the captured sequence of images, wherein the changing device doubles the default imaging cycle at least once when the brightness of the object is lower than the brightness corresponding to the default imaging cycle.

Referring to the Hashimoto reference, Hashimoto discloses an electronic camera comprising: a detection device, which detects brightness of the object; and a changing device which automatically changes the imaging cycle of the imaging device by doubling according to the brightness of the object, thereby changing the maximum exposure period for the imaging device for the captured sequence of images, wherein the changing device doubles the default imaging cycle at least once when the brightness of the object is lower than the brightness

corresponding to the default imaging cycle. (Fig. 7 – the default imaging cycle is set to 1/60 and then it changes to 1/30 to accommodate the brightness; abstract; col. 1, lines 47-53; col. 1, line 62 – col. 2, line 3; col. 5, lines 33-36; col. 8, lines 22-29; col. 11, lines 42-52; col. 14, lines 50-54; col. 17, lines 25-34; col. 18, lines 14-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the electronic camera disclosed by Anderson et al. and changed the exposure time according to the brightness of the object as disclosed by Hashimoto in order to appropriately cope with different imaging conditions.

Regarding claim 2, Anderson et al. in view of Hashimoto discloses all the limitations as previously discussed with respect to claim 1 except that the changing device is manually operated to change the cycle of the imaging device. Official Notice is taken that the changing device can be manually operated to change the cycle of the imaging device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have manually operated the changing device in order to change the cycle of the imaging device in order to give the user more control over the image capturing process.

Regarding claim 16, Anderson et al. in view of Hashimoto discloses all the limitations as previously discussed with respect to claim 1 as well as further disclosing a signal processor (344) for processing and temporarily storing image

signals outputted by the imaging device (224) before outputting to the display (302) (Anderson et al: col. 6, lines 47-65).

Regarding claim 17, Anderson et al. in view of Hashimoto discloses all the limitations as previously discussed with respect to claims 1 and 16 as well as further disclosing a memory card (354) for storing select images outputted by the imaging device (224) (Anderson et al.: col. 5, lines 40-49).

Regarding claim 18, Anderson et al. in view of Hashimoto discloses all the limitations as previously discussed with respect to claim 1 including that the rate is a video rate (frame rate), and the changing device (238) changes the video rate (348) to enable the imaging device to output brighter images to the display (Anderson et al: col. 7, lines 57-63; col. 8, lines 39-41 – correlating the frame rate with the exposure time will allow the display to output brighter images).

Regarding claim 19, Anderson et al. in view of Hashimoto discloses all the limitations as previously discussed with respect to claim 1, including that the imaging device (224) is a charge coupled device (CCD) that captures the sequence of images (Anderson et al.: col. 4, lines 61-64).

Regarding claims 20-26, these are method claims corresponding to the apparatus claims 1, 2, and 16-19. Therefore, claims 20-26 are analyzed and rejected as previously discussed with respect to claims 1, 2, and 16-19.

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Yamazaki et al. (U.S. Patent 5,604,537) discloses in Fig. 12 how three types of exposure control means of the shutter speed, the iris, and the AGC circuit are controlled in accordance with illuminance. The imaging cycle either doubles or halves depending on which way the subject brightness changes on the diagram.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R. Jones whose telephone number is 571-272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system: Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heather R Jones
Examiner
Art Unit 2621

HRJ
June 18, 2007



JOHN MILLER
SUPERVISORY PATENT EXAMINER
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